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DETERMINANTS OF THE PERFORMANCE OF DEVELOPMENT PROJECTS IN DEVELOPING COUNTRIES

Dr. Mahamadi Nanéma¹, Dr. Théophile Bindeoué Nassè², Prof. Alidou Ouédraogo³¹Norbert Zongo University, Koudougou (Burkina Faso)²University of Business and Integrated Development Studies, Wa (Ghana)³University of Moncton, Moncton (Canada)Corresponding Author: Dr. Théophile Bindeoué Nassè¹Corresponding Author Email: nassetheophile2009@gmail.com

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ABSTRACT

This article aims to analyze the determinants of the performance of development projects in developing countries in general and in particular in the Burkinabé context. This involves identifying the internal and external factors that explain the performance of development projects in the Burkinabé context. The methodology used is essentially based on the hypothetico-deductive approach which led to the definition of a sample of 44 respondents on the quantitative aspect of the study. The results of the study show that two explanatory variables positively and significantly influence the performance of development projects in Burkina Faso. This concerns in particular the technical organization of projects and the environment or the project intervention area. Notwithstanding these results, recommendations are formulated for more efficiency in the implementation of development projects.

Keywords: Performance, Project Management, World Bank, Project Management.

INTRODUCTION

Problem and Objectives of the Study

In Burkina Faso, the performance management of development projects has always been at the heart of the concerns of the Government and development partners. In the African context

Bande and Nassè (2020) demonstrate that development communication has some effects on performance. Carbonnel et al. (2020) also shows that there is a relationship between recruitment methods and performance. Thus, there are some few knowledge about the determinants of the performance of development projects. In 2016, the evaluation of the level of performance of projects and programs gave the following results: the average rating of development projects and programs was 38.22% ^[1], which reflects a poor performance in the implementation of management structures. Several major constraints were identified as obstacles to the execution of these projects and programs. These include administrative delays due to technical and financial partner procedures, procurement procedures and the failure of companies and service providers in general. According to the Cooperation and Development Report (2014), the World Bank is Burkina Faso's leading multilateral partner. To be more effective in its actions, it regularly reviews the performance of the development projects and programs it finances in its member countries. From the last review of operations, the overall disbursement rate is estimated at 30.7% while the disbursement ratio is estimated at 14.2%. This ratio is well below the target of 22% set by the Africa Region of the World Bank for each country.

A vague and polysemous concept, performance occupies a central place in management research. However, over the years, the requirements with which the company is confronted have increased, generating strong expectations from all interested parties, whether external (authorities, communities, customers, media, shareholders, insurers, associations, neighbors ...) or internal (staff, unions, group ...). Thus, quality at all levels is one of the key elements for a good performance (Nassè, 2015; Nassè, 2016) As a result, the multidimensional character of performance gradually intensified. Performance has therefore become *largo sensu*, that is to say, bringing together financial, social and environmental aspects to allow any organization to project itself into the future. It is important to ask the following general question: *What are the determinants of the performance of development projects in Burkina Faso?*

This research therefore focuses on the analysis of the determinants of the performance of development projects in Burkina Faso. In this perspective, a model will be used with data on 3 national projects under implementation that make up the World Bank's portfolio in Burkina Faso. The general question is broken down into two specific questions as follows:

- *What are the internal factors explaining the performance of a development project financed by the World Bank in Burkina Faso?*
- *What are the external factors explaining the performance of a development project financed by the World Bank in Burkina Faso?*

The objectives of our study will be expressed in terms of general objective and specific objectives. The overall objective of this study is to identify and analyze the determinants influencing the performance of development projects and programs in Burkina Faso.

Conceptual and Theoretical Framework of the Performance of Development Projects

The Notion of Performance

Business performance is a central notion in management science. Since the 80s, many researchers attached themselves to the set. The origin of the word performance dates back to the mid-19th century in the language French.

At that time, it referred to both the results achieved by a racehorse and the success achieved in a race. Then he pointed to the results and sporting achievement of an athlete. His sense evolved in the 20th century. Thus, according to Bourguignon (1995), performance can

be defined as “the achievement of organizational objectives, whatever the nature and variety of these objectives. This achievement can be understood in the strict sense (result, outcome) or in the broad sense of the process that leads to the result (action)” [1]. According to Voyer (2011) [3], performance can be the answer to the need in terms of quality, cost and time. It can be a juxtaposition of the effectiveness, the efficiency, the merits of organizations.

The Performance Triangle

The triple constraint triangle, also called the performance triangle, is often used to illustrate the interdependence of variables in a project. Indeed, in a project, changes made in one variable will irrevocably the impact on others or, in other words, focus stress is usually at the expense of others. Thus, for a given project, if we decide to reduce the development time, in order to maintain the agreed level of quality, it will be necessary to increase the budget by allocating more resources to it, for example, or, if not, accepting lower expectations. In terms of quality. Or, if we decide to reduce the project budget, in order to maintain the expected level of quality, it will be necessary to increase the development time granted or, if not, accept again to reduce expectations in terms of the quality.

Finally, if one decides to reduce the requirements of quality project, it is obviously possible either to reduce the costs, or to reduce the development time, or to divide the economy in both the costs and development time.

LITERATURE REVIEW

Studies on the performance factors of projects carried out in developing countries are rare. The few studies which were interested in this subject presented the various problems which hinder the good progress of the project and the achievement of the triple objective time-cost-quality thus constituting the factors of failure of these projects.

Ahsan and Gunawan (2010) concluded in their study that international development projects established in developing countries often experience cost and deadline overruns. Their study revealed that the main causes of deadlines are: 1) long delays in concluding contracts, acquiring land and civil works and recruiting consultants; 2) natural disasters; 3) bureaucracy. As for budget overruns, the main causes according to this study are: 1) the devaluation of the national currency in these countries; 2) the prices of the tenders; 3) large contingency budgets.

Khang and Moe (2008) for their part propose a series of success factors for projects in developing countries according to the phases of the project cycle: 1) for the design phase: clear understanding of the project environment on the part of the funding and implementing agencies and consultants; skills of project designers; effective consultations with stakeholders. 2) For the planning phase: compatibility between the priorities of key stakeholders; adequacy of resources and skills available to support project planning; skills of project planners; effective consultations with key stakeholders. 3) For the execution phase: compatibility of rules and procedures relating to project management; continued support from stakeholders; commitment to project goals and objectives; skills of the project management team; effective consultations with all stakeholders. 4) For the closure phase: adequate planning for project closure; skills of the project manager; effective consultations with key stakeholders. On the other hand, for the overall success of the project, these authors suggest the following factors: clear policies on the part of funding agencies and government (client) to support project activities and results; availability of competent and qualified local labor; strong local ownership of the project (by communities or project beneficiaries).

Furthermore, Diallo and Thuillier (2005) emphasize two main success factors. The first factor concerns the quality of communication and the relationship between the project coordinator and the task manager and between the members of the project team. The second factor relates to human resource management practices that can create and maintain cohesion and trust within the project team, such as kick off seminars and team building practices. Loosemore et al. (2003) support this point of view by considering communication as one of the key factors for the success of projects. They specify that this communication should have an internal as well as an external dimension. The internal dimension concerns effective communication between management and workers at different levels of the organization, in particular between the project team and the central HR departments. While the external dimension corresponds to communication with different external interest groups such as government agencies, pressure groups, local communities, unions, etc. The authors add that communication with these external interest groups is one of the most effective ways to detect potential problems, and their exclusion will only increase the propensity for crisis in the project. For Bande and Nassè only an efficient communication for development can help achieve a good performance of the projects in the context of developing countries. This type of communication should be participatory and comprehensive to the different actors to help enhance the projects performance.

In the light of the results of these studies, we conclude that the performance of these projects are determined both by factors related to project management and by factors relating to the external environment of the projects (economic, political and socio-cultural environment).

Hypothesis 1: the competence and know-how of the project management team, as well as the financial resources implemented, are the determinants of the performance of development projects at the internal level.

Hypothesis 2: the characteristics of the project intervention area are the main determinants of performance externally.

The Research Model

This model draws heavily on the model systemic and the definition even of project management given by the ISO 10006. The model connects two types of variables:

- The explained variable;
- The explanatory variables.
 - a. The explained variable or dependent variable

The explained variable of our study is “the performance of projects executed with World Bank financing” (see Figure 1 below). It does not require any particular justification, but rather to be explained. From where the interest to pass to the choice of the explanatory variables.

- b. Explanatory variables or independent variables

These are the variables that explain the performance achieved. It is about:

- ***Planning variable:*** It provides budget, standards of quality, the time of execution and the procedures to apply;
- ***the Competence or Know-how variable:*** It is linked to the experience of the project management unit. This experience s' improves as and to measure the duration of implementation of the project. High physical execution rates are generally a reflection of the good experience of the project team;

- **the Implementation or Organization variable:** This is the expertise and technology required to accomplish the technical tasks of the project (Slevin & Pinto, 1986).
- **the Environment or condition variable:** It takes into account the conditions and characteristics of the environment in which the projects are implemented. The definition of this variable is necessary because in several cases, the same project carried out in different regions have different performance scores. This situation suggests that the project environment has an influence on its success.

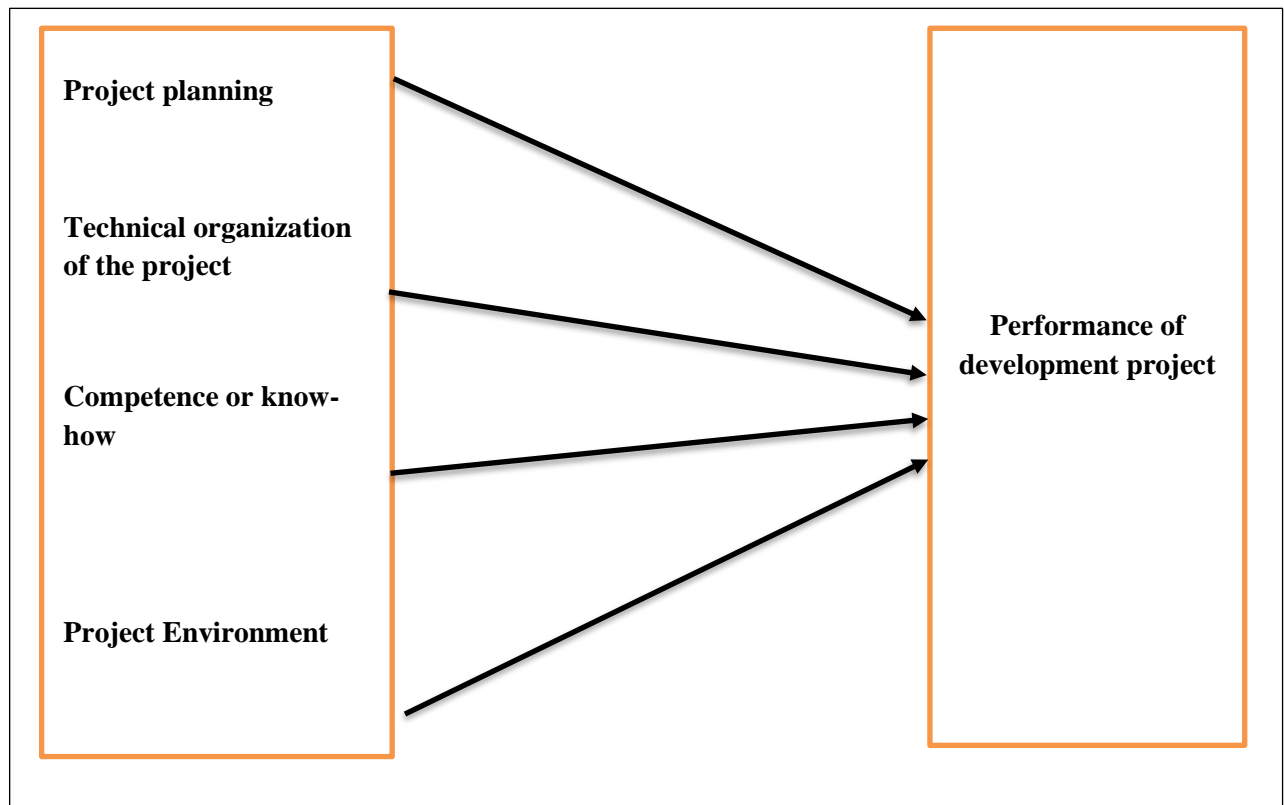


Figure 1: Analysis model
Source: Authors' construct

METHODOLOGY

We started with an observation on the performance of projects development financed by the World Bank in Burkina Faso to find bottlenecks of strangulation thereof. From this observation and after an analysis of the situation, we have retained that the problem emanates on the one hand from factors linked to the projects and on the other hand from factors linked to the project environment.

While the writings on the determinants of project performance have been consulted and the projects funded solely by the World Bank in Burkina Faso (currently under implementation) has been retained to solve the problem.

Notwithstanding this procedure and in the light of Piaget's definition, we can affirm that we have adopted the positivist posture for our research.

Nature of Research

This study corresponds to an explanatory quantitative approach. Indeed, Gavard-Perret et al. (2008) explain that the quantitative explanatory methods detect the influence of an explanatory variable on a variable to be explained. We seek to detect the influence of project management factors (as an explanatory variable) on the performance of development projects financed by the World Bank in Burkina Faso (as a variable to be explained).

The data have been collected with a self-administered questionnaire, developed and validated. This questionnaire constitutes an adaptation of the PIP proposed in the study by Slevin and Pinto (1986). It is made up of the following four sections:

first, sociodemographic characteristics of the respondent: sex, age, seniority, education;
second, descriptive data on the project: phase of the life cycle, sector of activity, organizational structure, country, cost;

third, project performance parameters: The questions in this section refer to indicators for measuring the presence or the absence of activities or practices related to the parameters of the performance model;

fourth, project performance: the questions in this section allow us to verify the presence or absence of project performance criteria (which constitutes the dependent variable of our model).

The independent variables and the dependent variable consist of 3 to 5 indicators (formulated in terms of questions) which are measured on a Likert scale in 5 levels. In our questionnaire, the response 1 corresponds to the opinion "totally disagree" while the answer 5 refers to the view "totally agree", 3 being a neutral opinion (neither agree nor disagree). The use of a questionnaire gives the advantage of being able to reach a large number of respondents which makes it possible to constitute a fairly large sample.

In addition, it has the great advantage of being able to measure a large number of variables using the same questionnaire.

Sample

This is a study which focuses on the analysis of factors explaining the performance of projects financed by the World Bank. According to the World Bank (2016), three projects are selected. These include:

- Youth Employment and Skills Development Project (PEJDC)
- Donsin Infrastructure and Transport Project (PITD)
- Support Project to the Energy Sector Development and Minerals (PADSEM)

According to the regulatory general projects, administration and management bodies are respectively the committee steering and unit Project Management (PMU). Therefore, it is important to know the members of these bodies as well as their number in the projects which are selected for the study.

The table below shows the number of respondents.

Table 1
Number of Respondents

No.	Organizational bodies	Number
PEJDC	Steering committee	10
	Project management unit	06
PADSEM	Steering committee	10
	Project management unit	06
MOAD	Steering committee	12
	Project management unit	06
Total		44

Source: Fieldwork

RESULTS AND DISCUSSION

Reliability Analysis

This section presents the internal consistency for each of the variables included in our model. The reliability analysis makes it possible to study the properties of measurement scales and of the elements that constitute them. It helps determine how closely the items in a questionnaire relate to each other and provides a general index of the consistency or internal consistency of the scale as a whole. It is measured using the Alpha coefficient of Cronbach (Gauthier, 2003, p. 201; Nassè, 2018).

This coefficient makes it possible to check the homogeneity of each of the constructs based on the average correlation between the indicators of the construct. This measure is recommended for analyzes using Likert scales (Nassè, 2020).

The reliability analysis procedure on SPSS calculates several frequently used measures of the reliability of the scale. The table below shows the measurements of Cronbach's Alpha coefficient for each of the constructs of our model.

Table 2
Cronbach's Alpha Coefficients

Variables	Cronbach's Alpha	Number of Valid cases (n)	Number of Items
<i>Planning the project</i>	.635	30	6
<i>Project organization</i>	.651	30	5
<i>Skills and know-how</i>	.721	30	4
<i>Environment or condition</i>	.672	30	4
<i>Project performance</i>	.617	30	4

Source: Fieldwork

Before interpreting these results, it is necessary to specify that the value of the coefficient Alpha is between 0 and 1. The higher the value of Cronbach's Alpha, the more the items represent the same phenomenon. Nunnally (1978) recommends an Alpha greater than .60 to decide on the reliability of the measurements. The Cronbach's alpha coefficients are satisfactory for all of our variables since they are all greater than .60, which indicates good homogeneity of our constructs.

Factor Analysis

Factor analysis attempts to identify the factors that explain the correlations to the interior items. Before starting the factor analysis, it is necessary to measure the adequacy of sampling by the coefficient of Kaiser-Meyer-Olkin (KMO), which evaluates the extended of the relationship psychometric items. Items can be factorized as soon as the value of the KMO exceeds .50 (Kaiser and Rice, 1974).

Table 3

Kaiser-Meyer-Olkin Coefficients (KMO)

Variables	Coefficient of KMO	Meaning of Bartlett	Number of Items
<i>Planning the project</i>	.605	.000	6
<i>Project organisation</i>	.624	.009	5
<i>Skills and know-how</i>	.565	.000	4
<i>Environment or condition</i>	.665	.001	4
<i>Project performance</i>	.573	.000	4

Source: Authors' design

The KMO coefficients are satisfactory for all of our variables since they are all greater than .50, so factor analysis is possible.

- ***Factor analysis relating to the planning variable***

The principal component analysis extracted a single factor whose eigenvalue is (2.466) and which explains 41.106% of the total variance, which allows us to admit the unidimensionality of the planning variable (see Appendix).

- ***Factor analysis relating to the Technical organization variable***

The principal component analysis extracted a single factor whose eigenvalue is 2.144 and which explains 42.882% of the total variance (see Appendix).

- ***Factor analysis relating to the skill variable***

The principal component analysis extracted a single factor whose eigenvalue is 2.239 and which explains 55.980% of the total variance (see Appendix).

- ***Factor analysis relating to the Environment variable***

The principal component analysis extracted a single factor whose eigenvalue is equal to 2.120 and which explains 53.012% of the total variance (see Appendix).

- ***Factor analysis relating to the Project performance variable***

The principal component analysis extracted a single factor whose eigenvalue is equal to 2.056 and which explains 51.390% of the total variance, which allows us to admit the unidimensionality of the project performance variable (see Appendix).

Model Estimation

After the creation of new variables in through the CPA, we proceed to a regression line of the model. The results are presented in the appendix. Note that the coefficient of determination of this estimate is equal to .455 and the adjusted one is .37. Otherwise, the performance of the projects is explained at 45% by the explanatory variables of the model.

Table 4

Results of Linear Regression

Dependent Variable: ANALYSIS 5		
	Coefficient	Probability
Analysis 1	.066	.691
Analysis 2	.576	.002*
Analysis 3	.159	.336
Analysis 4	.407	.042*

Note: * significance at the 5% level

Source: author's design based on estimation results

DISCUSSION

Estimation Results

- ***The influence of the planning variable***

This variable has the expected sign. Project planning is positively correlated with the level of project performance. This result is in accordance with various studies, notably those of Armstrong (1982), and Ansoff (1991). For them, planning is much more effective than an informal process based on chance when it comes to collecting and analyzing relevant information in order to create and maintain the company's alignment with its internal and external environment (Armstrong, 1982). Planning makes it possible to rationally determine a favorable strategic direction for the company (Porter, 1996). Thus, it can help companies to avoid costly mistakes and survive in environments highly competitive (Aram & Cowan, 1990). However, it should be noted that the variable does not have a significant effect ($p > .05$), indicating that project planning does not significantly influence its performance. This situation may be due to the loss of information due to the Principal component analysis.

- ***The influence of the skill and know-how variable***

The skill or know-how variable refers to the experience of the project team. This variable has the expected sign. The experience of the project team is positively correlated with the level of performance. This result is in accordance with various studies, in particular those of Yeamkong et al. (2010) which resulted in a positive relationship between performance and level of experience of the project team. Geoghegan and Dulewicz (2008) confirm this thesis and affirm the existence of an indirect relationship between the human dimension of project management and project performance. These authors suggest that the skills of the project manager regarding the management of the team proposed a factor key to compliance with the limit budget and the resolution of problems during the implementation of the project.

Indeed, the leadership skills of the project manager would play a key role in his ability to manage resources, to delegate some of these powers and responsibilities, to develop and to motivate the members of his team.

These skills are correlated significantly, to after the study conducted by the authors, with the resolution of problems and not exceeded the project budget. In other words, most project managers competent in resolution of problems are those that are able to delegate powers, motivate, develop the skills of the members of their team and manage resources in a manner effective and efficient. However, it should be noted that the variable does not have a significant effect ($p > .05$), indicating that the experience of the project team does not significantly influence its performance. This situation may be due to the loss of information due to the Principal component analysis.

- ***The influence of the technical organization variable***

With regard to the environment or project condition variable, it appears that at the 5% threshold, the variable has a positive and significant influence on the performance of each project. The quality of the technical organization of the project has a positive and significant influence on the performance of the projects. This result could be explained by the efforts made at the level of the Burkinabè public administration to improve the monitoring of project activities. These efforts focus on the adoption of a specific regulation for projects and programs and the total membership of the Government to all initiatives on

the effectiveness of cooperation in term of development (Declaration of Paris, Busan Partnership).

- ***The role of the environment variable***

With regard to the environment or project condition variable, it emerges that at a threshold of 5%, the variable exerts a positive and significant influence on the performance of each project in said zone. The more projects a locality receives, the more efficient they are in that locality. This result is in accordance with the work of De Medeiros (2007) on agricultural projects in Brazil that reached to the conclusion that the performance of the project increases with the number of partners. The projects between them constitute real partners at the local level. This could be explained by the effects of training and complementarity between projects and learning in the community beneficiary.

Indeed, for some time, especially in starting the implementation of the Declaration of Paris in 2005 and the Partnership Bussan in 2012, the Government of Burkina Faso is working for a division of labor between the partners in development, focusing on complementarity. Pooled funds and joint evaluations which have become increasingly important nowadays promote the implementation of complementary projects.

The learning effects refer to the acquisition of know-how by the local community with regard to projects that they have already experienced. Thus, the more projects a region receives, the more the local population learns from experience, and the better the execution of local projects improves. In Burkina Faso, this reality can be observed through the fact that the capacity of communities at the base to support the project is a criterion of choice for its implementation. This result is also in line with the conclusions of several studies.

Bande and Nassè (2020) have demonstrated the benefits of community participation in the success of development projects. In Burkina Faso, this result could be explained by the fact that the associations constitute a channel for carrying out certain activities essential for the project.

These activities, which mainly aim to reach the communities, relate to communication, mobilization and awareness. Being given the comparative advantage of organizations in these activities, their presence in a place is beneficial projects, including those focusing on awareness and community mobilization.

Recommendations

These recommendations will focus on the explanatory variables. Indeed, it is these variables that constitute the levers of action on which we can act to improve performance in the management of these projects.

The implementation of projects under favorable conditions

The study showed that the environment plays a determining role in the performance of the project. The presence of associations, projects and the level of schooling in the locality have a significant impact on the success of projects. To reinforce performance, a double action can then be recommended to the Government and to the technical and financial partner. First of all, it is important to direct new projects towards localities that have favorable environmental conditions. These are areas where there are already projects, associations and groups or localities with high school attendance rates. Then, we must create the environmental conditions in disadvantaged localities. This action will consist among other things in strengthening local

literacy in collaboration with local authorities, promoting the emergence of associations and village groups in said localities.

On the technical organization of projects

Project managers must use procurement plans which are dashboards for monitoring deadlines and execution monitoring dashboards. This will allow them to be able to react in time to take the necessary corrective measures; In addition, for a good quality of studies, project managers should strengthen their control system before launching calls for tenders.

Improving project performance also involves training technical staff in project management and public procurement reforms to anticipate the new support environment for project management. The project managers should also have the right communication skills to improve performance (Bande & Nassè, 2020).

Research Limitations

This section discusses the results and shows the limitations of this study as well as the approaches we recommend for future research to overcome these limitations.

The first limitation of our research is related to the sample size. In fact, the small number of cases included in our sample, which does not exceed 50 respondents, prevented us from carrying out more sophisticated statistical analyzes in order to properly verify our hypotheses. This limit had consequences on several aspects of our methodology and our results.

In addition, another limitation to be underlined in the context of this study, as was also raised in the context of the study by Dolan (2005), is that the majority of our respondents agree that the practices management systems have been implemented and administered appropriately (with an average score of 4.75 on a scale of 1 to 5). Likewise, the majority of these respondents agree that the criteria for the success of their projects have been met (with an average score of 4.96 on a scale of 1 to 5). It would have been interesting to redo the bivariate analyzes based on a sample made up of projects that were carried out with failure. Such an exercise will make it possible to verify whether in such projects, the project management practices would not be administered in an adequate manner and to test the existence or not, of a relationship between the failure of these projects and the inadequacy project management practices. The involvement, in the analysis, of a control group made up of failed projects would thus be one of the possible alternatives to achieve this end.

Although the results of our study are limited by a set of methodological considerations, the fact remains that these results are supported by a panoply of theoretical research and empirical studies which confirm them, at least in this respect which concerns the existence of explanatory factors of the performance of development projects. Thus, we remain convinced, despite these limitations that this study will contribute to the enrichment of knowledge relating to the role of explanatory factors of the performance of projects both in a specific context of developing countries as well as in a much more global context.

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Appendices

Appendix I: Research Questionnaire

section I

Le but de la présente section est de recueillir certaines informations personnelles sur le (la) répondant(e). Ces données serviront à raffiner les analyses et seront traitées en toute confidentialité.

SECTION 1 : DONNÉES SUR LE (LA) RÉPONDANT(E)

Le but de la présente section est de recueillir certaines informations personnelles sur le (la) répondant(e). Ces données serviront à raffiner les analyses et seront traitées en toute confidentialité.

1. quel est votre sexe ?

- ☐ 1. Masculin ☐ 2. Feminin

2. quel est votre age ?

- ☐ 1. De 18 a 24 ans ☐ 2. De 25 a 34 ans
☐ 3. De 35 a 44 ans ☐ 4. De 45 a 54 ans
☐ 5. De 55 et plus

3. Depuis combien de temps travaillez-vous dans cette organisation ?

- ☐ 1. Moins d'une année ☐ 2. Entre un an et trois ans
☐ 3. Plus de trois ans

4. Quel est votre niveau d'études ?

- ☐ 1. Collegial
☐ 2. Universitaire premier cycle
☐ 3. Universitaire deuxième cycle
☐ 4. Autre

SECTION 2: DONNÉES DESCRIPTIVES SUR LE PROJET

Le but de la présente section est de recueillir certaines informations générales sur le projet qui fera l'objet des sections 3 et 4 de ce questionnaire. Veuillez inscrire l'information suivante sur le projet que vous avez choisi:

5. Nom du projet:

6. Date de début :

7. la fin du projet

8. Quelle est votre fonction dans le projet ?

9. Le projet se réalise principalement

- ☐ 1. Ouagadougou
☐ 2. Dans une ou plusieurs grandes villes du Burkina Faso
☐ 3. Autres lieux

10. Dans quelle plage se trouve le budget de votre projet ?

- ☐ 1. Moins de 25 millions de Dollar US
☐ 2. Entre 25 et 50 millions de Dollar US
☐ 3. Plus de 50 millions de Dollar US

11. Selon la réglementation générale des projets, dans quelle des catégories ci-dessous se trouve votre projet ?

- ☐ 1. Catégorie A ☐ 2. Catégorie B ☐ 3. Catégorie C

12. Quelle est la forme d'exécution du projet ?

- ☐ 1. Exécution par régie
☐ 2. Exécution par maîtrise d'ouvrage
☐ 3. Projets clé en main / produit en main

PREMIERE VARIABLE : PLANIFICATION DU PROJET

On vous demande d'exprimer votre degré d'accord avec ces énoncés, dans la mesure où ils s'appliquent (ou non) à votre projet. Veuillez encrer le chiffre qui correspond le mieux à votre connaissance ou votre compréhension de la situation observée.

13. Un plan détaillé (incluant un échéancier, des lots de travail, des besoins en main d'œuvre et en équipement) est disponible

- ☐ 1. Pas du tout d'accord ☐ 2. Pas d'accord
☐ 3. Ni en accord ni en désaccord ☐ 4. D'accord
☐ 5. Tout à fait d'accord

14. Les intervenants connaissent les activités ayant des marges qui peuvent être utilisées sur certains lots de travail en cas d'urgence

- ☐ 1. Pas du tout d'accord ☐ 2. Pas D'accord
☐ 3. Ni en accord ni en désaccord ☐ 4. D'accord
☐ 5. Tout à fait d'accord

15. Les intervenants disposent d'un système satisfaisant de mesures de la performance (budget, échéancier)

- ☐ 1. Pas du tout d'accord ☐ 2. Pas d'accord
☐ 3. Ni en accord ni en désaccord ☐ 4. D'accord
☐ 5. Tout à fait d'accord

16. Les intervenants disposent d'un système d'information pour produire des rapports périodiques sur les mesures de performance choisies

- ☐ 1. Pas du tout d'accord ☐ 2. Pas d'accord
☐ 3. Ni en accord ni en désaccord ☐ 4. D'accord
☐ 5. Tout à fait d'accord

17. Les besoins en ressources humaines sont précisés dans la planification du projet

- ☐ 1. Pas du tout d'accord ☐ 2. Pas d'accord
☐ 3. Ni en accord ni en désaccord ☐ 4. D'accord
☐ 5. Tout à fait d'accord

18. Un budget détaillé du projet a été préparé

- ☐ 1. Pas du tout d'accord ☐ 2. Pas d'accord
☐ 3. Ni en accord ni en désaccord ☐ 4. D'accord
☐ 5. Tout à fait d'accord

DEUXIEME VARIABLE : ORGANISATION TECHNIQUES DU PROJET

On vous demande d'exprimer votre degré d'accord avec ces énoncés, dans la mesure où ils s'appliquent (ou non) à votre projet. Veuillez encrer le chiffre qui correspond le mieux à votre connaissance ou votre compréhension de la situation observée.

19. Les tâches sont exécutées d'une manière appropriée

- ☐ 1. pas du tout d'accord ☐ 2. pas d'accord
☐ 3. ni en accord ni en désaccord ☐ 4. d'accord
☐ 5. tout à fait d'accord

20. les moyens techniques disponibles sont adéquats pour le projet

- ☐ 1. pas du tout d'accord ☐ 2. pas d'accord
☐ 3. ni en accord ni en désaccord ☐ 4. d'accord
☐ 5. tout à fait d'accord

21. Les consultants et des gestionnaires externes ont révisés les principaux plans et l'approche globale du projet

- ☐ 1. pas du tout d'accord ☐ 2. pas d'accord
☐ 3. ni en accord ni en désaccord ☐ 4. d'accord
☐ 5. tout à fait d'accord

22. les plans et des approches alternatives sont préparés pour le projet

- ☐ 1. pas du tout d'accord ☐ 2. pas d'accord
☐ 3. ni en accord ni en désaccord ☐ 4. d'accord
☐ 5. tout à fait d'accord

23. les moyens techniques utilisés dans le projet fonctionnent bien

- ☐ 1. pas du tout d'accord ☐ 2. pas d'accord
☐ 3. ni en accord ni en désaccord ☐ 4. d'accord
☐ 5. tout à fait d'accord

TROISIEME VARIABLE : COMPETENCE OU SAVOIR-FAIRE

On vous demande d'exprimer votre degré d'accord avec ces énoncés, dans la mesure où ils s'appliquent (ou non) à votre projet. Veuillez encrer le chiffre qui correspond le mieux à votre connaissance ou votre compréhension de la situation observée.

24. Le personnel comprend les tâches à exécuter

- ☐ 1. pas du tout d'accord ☐ 2. pas d'accord
☐ 3. ni en accord ni en désaccord ☐ 4. d'accord
☐ 5. tout à fait d'accord

25. L'équipe de travail est à la hauteur des exigences techniques de son travail

- ☐ 1. pas du tout d'accord ☐ 2. pas d'accord
☐ 3. ni en accord ni en désaccord ☐ 4. d'accord
☐ 5. tout à fait d'accord

26. Le projet est bien compris par les personnes qui le réalisent

- ☐ 1. pas du tout d'accord ☐ 2. pas d'accord
☐ 3. ni en accord ni en désaccord ☐ 4. d'accord
☐ 5. tout à fait d'accord

27. L'équipe de gestion de projet disposent d'une bonne expérience en matière de gestion de projet

- ☐ 1. pas du tout d'accord ☐ 2. pas d'accord
☐ 3. ni en accord ni en désaccord ☐ 4. d'accord
☐ 5. tout à fait d'accord

QUATRIEME VARIABLE : ENVIRONNEMENT DU PROJET

On vous demande d'exprimer votre degré d'accord avec ces énoncés, dans la mesure où ils s'appliquent (ou non) à votre projet. Veuillez encrer le chiffre qui correspond le mieux à votre connaissance ou votre compréhension de la situation observée.

28. Dans la zone d'intervention du projet, Le nombre de groupements et associations présents est élevé.

- ☐ 1. pas du tout d'accord ☐ 2. pas d'accord
☐ 3. ni en accord ni en désaccord ☐ 4. d'accord
☐ 5. tout à fait d'accord

29. le niveau d'urbanisation est élevé de la région d'intervention du projet

- ☐ 1. pas du tout d'accord ☐ 2. pas d'accord
☐ 3. ni en accord ni en désaccord ☐ 4. d'accord
☐ 5. tout à fait d'accord

30. Le nombre de projet déjà existant dans la zone d'intervention est élevé

- ☐ 1. Pas du tout d'accord ☐ 2. Pas d'accord
☐ 3. Ni en accord ni en désaccord ☐ 4. D'accord
☐ 5. Tout à fait d'accord

31. le niveau d'éducation est élevé de la zone d'intervention.

- ☐ 1. pas du tout d'accord ☐ 2. pas d'accord
☐ 3. ni en accord ni en désaccord ☐ 4. d'accord
☐ 5. tout à fait d'accord

CINQUIEME VARIABLE: LA PERFORMANCE DU PROJET

En relation avec chaque énoncé, encrer le chiffre qui correspond le mieux à la performance de votre projet.

32. Les exigences techniques spécifiées au début de la phase de planification sont atteints

- ☐ 1. pas du tout d'accord ☐ 2. pas d'accord
☐ 3. ni en accord ni en désaccord ☐ 4. d'accord
☐ 5. tout à fait d'accord

33. Les échéanciers du projet sont respectés

- ☐ 1. pas du tout d'accord ☐ 2. pas d'accord
☐ 3. ni en accord ni en désaccord ☐ 4. d'accord
☐ 5. tout à fait d'accord

34. Les objectifs du projet en termes de coûts sont atteints

- ☐ 1. pas du tout d'accord ☐ 2. pas d'accord
☐ 3. ni en accord ni en désaccord ☐ 4. d'accord
☐ 5. tout à fait d'accord

35. Les objectifs du projet en termes de qualité des extrants sont atteints

- ☐ 1. pas du tout d'accord ☐ 2. pas d'accord
☐ 3. ni en accord ni en désaccord ☐ 4. d'accord
☐ 5. tout à fait d'accord

APPENDIX II: Additional Analysis

Table 5

Total Explained Variance of The Planning Variable

Component	Initial eigenvalues			Extraction Sums of squares of the factors selected		
	Total	% of variance	cumulative%	Total	% of variance	cumulative%
1	2.466	41.106	41.106	2.466	41.106	41.106
2	1.097	18.291	59.397			
3	.973	16.223	75.620			
4	.720	12.003	87.622			
5	.531	8.849	96.471			
6	.212	3.529	100.000			

Extraction method: Principal component analysis.

Source: Fieldwork

Table 6

Total Explained Variance of The Variable Technical Organization

Component	Initial eigenvalues			Extraction Sums of squares of the factors selected		
	Total	% of variance	cumulative%	Total	% of variance	cumulative%
1	2.144	42.882	42.882	2.144	42.882	42.882
2	1.133	22.665	65.547			
3	.744	14.889	80.436			
4	.597	11.945	92.381			
5	.381	7.619	100.000			

Extraction method: Principal component analysis.

Source: Fieldwork

Table 7

Total Explained Variance of The Skill Variable

Component	Initial eigenvalues			Extraction Sums of squares of the factors selected		
	Total	% of variance	cumulative%	Total	% of variance	cumulative%
1	2.239	55.980	55.980	2.239	55.980	55.980
2	1.008	25.207	81.187			
3	.542	13.546	94.733			
4	.211	5.267	100.000			

Extraction method: Principal component analysis.

Source: Fieldwork

Table 8

Total Variance Explained by The Environment Variable

Component	Initial eigenvalues			Extraction Sums of squares of the factors selected		
	Total	% of variance	cumulative%	Total	% of variance	cumulative%
1	2.120	53.012	53.012	2.120	53.012	53.012
2	.877	21.929	74.941			
3	.677	16.924	91.864			
4	.325	8.136	100.000			

Extraction method: Principal component analysis.

Source: Fieldwork

Table 9

Total Variance Explained Variable Project Performance

Component	Initial eigenvalues			Extraction Sums of squares of the factors selected		
	Total	% of variance	cumulative%	Total	% of variance	cumulative%
1	2.056	51.390	51.390	2.056	51.390	51.390
2	1.222	30.548	81.938			
3	.383	9.579	91.516			
4	.339	8.484	100.000			

Extraction method: Principal component analysis.

Source: Fieldwork

Table 10

KMO Index and Bartlett Test

Precision measurement of Kaiser-Meyer-Olkin sampling.	.605
Approximate chi-square	40.431
Bartlett's sphericity test	Dof
	15
Meaning of Bartlett	.000

Source: Fieldwork

Table 11

KMO Index and Bartlett test

Precision measurement of Kaiser-Meyer-Olkin sampling.	.624
Approximate chi-square	23.527
Bartlett's sphericity test	Dof
	10
Meaning of Bartlett	.009

Source: Fieldwork

Table 12

KMO Index and Bartlett Test

Precision measurement of Kaiser-Meyer-Olkin sampling.	.565
Approximate chi-square	36.381
Bartlett's sphericity test	Dof
	6
Meaning of Bartlett	.000

Source: Fieldwork

Table 13

KMO Index and Bartlett test

Precision measurement of Kaiser-Meyer-Olkin sampling.	.665
Approximate chi-square	23.942
Bartlett's sphericity test	Dof
	6
Meaning of Bartlett	.001

Source: Fieldwork

Table 14

KMO Index and Bartlett test

Precision measurement of Kaiser-Meyer-Olkin sampling.	.573
Approximate chi-square	30.029
Bartlett's sphericity test	Dof
	6
Meaning of Bartlett	.000

Source: Fieldwork

Table 15

Model summary

Model	R	R-two	R-two adjusted	Standard error of estimate
1	.674 ^a	.455	.367	.79536717

Table 16

Coefficients^a

Model		Non-standardized coefficients		Standardized coefficients	t	Sig.
		AT	Standard error	Beta		
1	(Constant)	9.164E-017	.145		.000	1.000
	REGR factor score 1 for analysis 1	.066	.165	.066	.402	.691
	REGR factor score 1 for analysis 2	.576	.164	.576	3.513	.002
	REGR factor score 1 for analysis 3	.159	.162	.159	.782	.336
	REGR factor score 1 for analysis 4	.107	.164	.297	2.011	.042
	at. Dependent variable: REGR factor score 1 for analysis 5					

Source: Fieldwork

[1] The disbursement rate is a synthetic index which provides information on:

1. The robustness of national procedures,
2. On the overall fluidity of the public expenditure chain,
3. On the technical capacity of the actors, and
4. On the execution time of projects and therefore on the time taken to deliver services to populations and beneficiaries in general.

[2] François Bourguignon is a French economist

[3] Pierre Voyer, Management dashboards and performance indicators (2011)

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